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IN REPLY REFER TO:
EMC 14-034

February 27, 2014

Clean Water Branch
Environmental Management Division
Department of Health
919 Ala Moana Boulevard, Room 301
Honolulu, Hawaii 96814-4920

2014 FEB 28 11:55AM

Gentlemen:

Subject: Public Notice Permit for the National Pollutant Discharge Elimination System (NPDES) Application for the Marine CORPS Base Hawaii (MCBH) Kaneohe Bay Water Reclamation Facility Draft Permit No. HI 0110078

The City and County of Honolulu hereby submits the attached comments on the Public Notice Permit No. 0110078 dated January 30, 2014.

If you have any questions, please contact Cleveland (CJ) Jaramilla of our Monitoring and Compliance Branch, Division of Environmental Quality, at 768-3253.

Sincerely,

Lori M.K. Kahikina, P.E.
Director

Enclosure: Comments on proposed draft MCBH Kaneohe Bay Water Reclamation Facility draft NPDES permit

| Comment # | Reference | Comment |
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| | | **FACT SHEET** |
| 1 | Page 5, Part B.4 | As the Fact Sheet, page 5, acknowledges "CWA Section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources." The Pacific Ocean off the Mokapu Peninsula is not identified in the Clean Water Act, Section 303(d) list of impaired water bodies in either the 2008/2010 State of Hawaii Water Quality Monitoring and Assessment Report or the 2012 State of Hawaii Water Quality Monitoring and Assessment Report approved on September 20, 2013 by EPA. Additionally, the statement regarding the water impairment status of the southern region of Kaneohe Bay is irrelevant since this water is remotely distant from the Mokapu Outfall discharge. |
| 2 | Page 12, Part D.2.c.(3), and Pages 17-20 Part D.2.d.(3) | Using the minimum dilution in the absence of an average dilution for the calculation of effluent limitations for human health standards for carcinogens such as chlordane is flawed.<br><br>The *State Toxics Control Program: Derivation of Water Quality-Based Discharge Toxicity Limits for Biomonitoring and Specific Pollutants* (hereinafter, STCP) identifies the procedures for calculating permit limitations for specific toxic pollutants for the protection of aquatic life and human health. The STCP states that the average dilution value is used when comparing toxic pollutants in effluent discharges through a submerged outfall to numeric human-health fish consumption standards for carcinogens. This guidance was not used to determine effluent limitations in the permit.<br><br>The outfall dilution analyses conducted by the City's consultant HDR\|HydroQual which was submitted to DOH via letter dated October 22, 2013 provides the appropriate average dilution value.<br><br>The water quality criterion for chlordane was based on human health using carcinogenic endpoints in the calculation. This calculation is conservative in terms of cancer potency and bio-concentration factors.<br><br>On June 16, 2009, the Governor of the State of Hawaii signed legislation that conforms the State Water Quality Standard for chlordane to the current federal standard as set forth in the latest EPA National Recommended Water Quality Criteria (Office of Science and Technology, 2002 & 2006) which incorporate over 20 years of nationwide scientific research concerning the carcinogenicity of toxic pollutants. This amendment was adopted by the Hawaii State Department of Health in December 2009, approved by the Governor on January 25, 2010 and submitted to the EPA for approval in February 2010. Ignoring DOH's rule making and the State's position on water quality standards to develop water quality based effluent limits for chlordane is not justifiable. |

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| 3 | Page 20 item D.2.e and Page 22, item D.2.f. | The determination that a reasonable potential exists to exceed water quality standards for ammonia nitrogen and nitrate + nitrite nitrogen is contradicted by the fact that the receiving waters in the vicinity of the Mokapu Ocean Outfall is not impaired. As the Fact Sheet, page 5, acknowledges "CWA Section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources." The Pacific Ocean off the Mokapu Peninsula is not identified in the Clean Water Act, Section 303(d) list of impaired water bodies in the 2012 303(d) list. At present, no TMDLs have been established for this waterbody."<br><br>Additionally, the stated purpose of the Hawaii water quality standards for nitrate + nitrite and ammonia nitrogen is to prevent excess algal growth. EPA guidance on nutrient criteria recommends that total nitrogen be used as the measure of algal growth potential, instead of ammonia or nitrate + nitrite nitrogen. Per the DOH evaluation, the observed total nitrogen concentrations are in full compliance with State water quality standards at all stations for all years reviewed, providing supporting evidence that nitrogen levels are not problematic in the vicinity of the Mokapu Ocean Outfall discharge. While it is recognized that water quality standards for nitrate + nitrite and ammonia nitrogen exist and must be complied with, the absence of a larger nitrogen problem calls for more latitude in interpretation of reasonable potential for nitrate+nitrite and ammonia nitrogen. |
| 4 | Page 22, top of page | The rational on the Permittee to conduct a ZOM dilution study to verify that assimilative capacity within the receiving waters exists for ammonia nitrogen contradicts the previous page in which an analysis of the nutrient levels at control stations MB1 and MB2 indicate assimilative capacity does exists. |
| 5 | Page 24, top of page | The rational on the Permittee to conduct a ZOM dilution study to verify that assimilative capacity within the receiving waters exists for nitrate + nitrite nitrogen contradicts the previous page in which an analysis of the nutrient levels at control stations MB1 and MB2 indicate assimilative capacity does exists. |
| 6 | Page 25 – 27, Item D.2.i Enterococcus, | DOH indicated that because human contact can occur in the Zone of Mixing (though infrequent) and in receiving waters where potential for acute illness from pathogens can occur, end of pipe limits for enterococcus has been established. This is not an adequate justification to establish an end of pipe limit for enterococcus. There is no justifiable basis for establishing water quality based enterococcus discharge limits in the permit because there is no reasonable potential that enterococcus concentrations in the KRWWTP's effluent cause or contribute to an exceedance of the water quality standards based on the following:<br><br>(a) the draft permit allows a Zone of Mixing;<br>(b) the impact of the discharge to receiving water is measured by compliance with the applicable Federal and State Water Quality Standards that are protective of recreational use; and<br>(c) DOH indicated that there are no exceedances of enterococcus at the edge of the ZOM. |

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| 7 | Page 28, item k., paragraph | The reliance on the *T. gratilla* species to conduct WET testing as a compliance requirement is inappropriate for a number of reasons, including: (a) EPA only recently placed the guidance method for conducting Whole Effluent Toxicity Tests on the sea urchin *T. gratilla* in final form in April 2012; (b) DOH has only recently modified the test evaluation method under Part B.3. of the Permit to specify use of the Test of Significant Toxicity ("TST") approach; and (c) past results of the *T. gratilla* tests are inconsistent with WET test results using the other permit-required test species (*Ceriodaphnia dubia*) which indicate that the effluent does not contain evidence of unacceptable toxicity. |
| 8 | Page 33, Part E.1. Table F-9 | The title "ZOM Monitoring Data" to Table F-9 is misleading since the numbers reported under the column, "Maximum Reported Concentration" appears to be effluent concentrations of the various monitoring parameters. |
| 9 | Page 36, Table F-12 | The data entries for turbidity for stations M2 and M5 and chlorophyll a for station M6 in the Table F-12 , Offshore Monitoring Stations are inconsistent with the data entries in Table F-11 of the Fact Sheet, Offshore Monitoring Stations for the Kailua Regional Wastewater Treatment Plant dated January 16, 2014. |
| **DRAFT PERMIT** | | |
| 10 | Page 3, Part A.1, 2nd Table of Effluent Limitations and Monitoring Requirements | Delete discharge limitations for enterococcus. It is inappropriate and unjustifiable for DOH to impose numerical effluent limitations for enterococcus. Also see comment #6. |
| 11 | Page 4, Part A.1, 2nd Table of Effluent Limitations and Monitoring Requirements, footnote #7 | Correct the reference. The current approved membrane filter test method is the 2009 version (Method 1600: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI), EPA-821-R-09-016). |
| 12 | Page 4, Part A.1, 3rd Table of Effluent Limitations and Monitoring Requirements | Delete discharge limitations for ammonia nitrogen and nitrate + nitrite nitrogen. It is inappropriate and unjustifiable for the Department of Health to impose numerical effluent limitations for ammonia nitrogen and nitrate + nitrite nitrogen. Also see comment #3. |
| 13 | Page 6, Part A.3 | Delete the requirement for interim discharge limitations for enterococcus, all tasks and compliance dates related to the requirement, and the compliance schedule for complying with the final enterococcus discharge limitation including the compliance dates. There is no reasonable potential concern to establish WQBEL for chlordane. Also see comment #6. |

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| 14 | Page 14, Part B.6, last paragraph | Delete paragraph. As worded, the paragraph requires that the Permittee incorporate comments from the Director within 14 calendar days of the plan submittal regardless of whether or not comments are received from the Director. |
| 15 | Page 21, Part E.1 | Delete ZOM Dilution Analysis Study. Also see comments #2, #3, #4 and #5. |
| 16 | Page 40, Part I.5 | Delete requirement that "any" planned alterations or additions be reported quarterly. This requirement for reporting any "planned changes," no matter how minor, will impede normal operation and maintenance activities of the facility. |
| 17 | Appendix 1, Monitoring Methods, Pages 1-4 | Recommend the various methods identified in the column entitled "Analytical Method" be revised to state "As specified in 40 CFR 136". |